

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (currently amended) A method for improving blast resistance ~~at an interior of a wall~~ of a structure, comprising:

spraying a layer of an elastomeric material to form a blast resistant panel of a predetermined thickness; and

once cured, securing said [[layer]] blast resistant panel to said interior a surface of said [[wall]] structure.

2. (original) A method as set forth in Claim 1, wherein said elastomeric material is selected from the group consisting of polyurea, polysiloxane; polyurethane, and a polyurea/polyurethane hybrid.

3. (currently amended) A method as set forth in Claim ~~[[2]]~~1, wherein said elastomeric material is a polyurea material.

4. (currently amended) A method as set forth in Claim 2, wherein said elastomeric material has ~~[[an]]~~ a percent elongation at break in a range of about 100-800%, and has a tensile strength greater than about 2000 psi.

5. (original) A method as set forth in Claim 4, wherein said elastomeric material has a percent elongation of break in a range of about 400-800%.

6. (currently amended) A method as set forth in Claim 1, wherein said panel is flexible. ~~layer of elastomeric material is produced in a cured panel form and is subsequently secured to said interior or said wall.~~

7. (original) A method as set forth in Claim 6, wherein said elastomeric material is selected from the group consisting of polyurea, polysiloxane; polyurethane, and a polyurea/polyurethane hybrid.

8. (currently amended) A method as set forth in Claim ~~[[7]]~~6, wherein said elastomeric material is a polyurea material.

9. (original) A method as set forth in Claim 7, wherein said elastomeric material has an percent elongation at break in a range of about 100-800%, and has a tensile strength greater than about 2000 psi.

10. (original) A method as set forth in Claim 9, wherein said elastomeric material has a percent elongation of break in a range of about 400-800%.

11. (currently amended) A method as set forth in Claim 6, wherein ~~said step of spraying said layer of~~ said elastomeric material further comprises spraying said elastomeric material onto a fabric reinforcement layer.

12. (currently amended) A method as set forth in Claim 1, wherein ~~said step of spraying said layer of polymer~~ said elastomeric material comprises spraying said layer directly onto a molding surface of a wall of a structure.

13. (currently amended) A method as set forth in Claim ~~[[12]]~~1, wherein ~~said step of spraying said layer of~~ said elastomeric material ~~further comprises~~ positioning a fabric reinforcement layer on a molding surface; and spraying said elastomeric material onto ~~[[a]]~~ said fabric reinforcement layer on said molding surface.

14. (currently amended) A blast-resistant panel, comprising:
a cured layer of ~~[[an]]~~a sprayed elastomeric material having a predetermined thickness, and
fastener elements for securing said ~~elastomeric material~~ cured layer to a ~~[[wall]]~~surface of a structure.

15. (currently amended) A blast-resistant panel as set forth in Claim 14, wherein the elastomeric material ~~[[layer]]~~ is a material selected from the group consisting of polyurea; polysiloxane; polyurethane, and a polyurea/polyurethane hybrid.

16. (currently amended) A blast-resistant panel as set forth in Claim ~~[[15]]~~14, wherein said elastomeric material is polyurea.

17. (original) A blast-resistant panel as set forth in Claim 14, further comprising a channel member secured to said panel around at least a portion of a periphery thereof.

18. (currently amended) A blast-resistant panel as set forth in Claim 14, wherein the ~~elastomeric~~ blast resistant panel has a thickness in the range of about 100 mil to about 250 mil.

19. (currently amended) A blast-resistant panel as set forth in Claim 18, wherein the ~~elastomeric~~ blast resistant panel has a thickness of about 180 mil.

20. (original) A blast-resistant panel as set forth in Claim 14, wherein said elastomeric material has a percent elongation at break in a range of about 100-800%.

21. (original) A blast-resistant panel as set forth in Claim 20, wherein said elastomeric material has a percent elongation at break in a range of about 400-800%.

22. (original) A blast-resistant panel as set forth in Claim 20, wherein said elastomeric material has a tensile strength greater than about 2000 psi.

23. (original) A blast-resistant panel as set forth in Claim 14, wherein said panel further comprises a fabric reinforcing layer.

24. (original) A blast-resistant panel as set forth in Claim 16, wherein said panel further comprises a fabric reinforcing layer.

25. (original) A blast-resistant panel as set forth in Claim 24, wherein said fabric reinforcing layer is constructed of aramid fibers.

26. (original) A blast-resistant panel as set forth in Claim 24, wherein said fabric reinforcing layer is constructed of polyester fibers.

27. (currently amended) A system for improving the blast resistance of a structure, comprising:

one or more panels constructed of an elastomeric material sprayed onto a fabric reinforcing layer,

said one or more panels having a steel channel fastened around a periphery thereof; and

a plurality of fasteners adapted to fasten said steel channel and said one or more panels to a wall of said structure.

28. (new) The system of claim 27 wherein said steel channel comprises:
a pair of opposing sides depending from opposite ends of a bottom portion to form a substantially “U” shaped channel.

29. (new) The system of claim 27 wherein said steel channel comprises:
a “U” shaped steel channel along a top portion, a bottom portion, and a first side portion of the periphery; and

a “Z” shaped steel channel along a second side portion of the periphery opposite of the first side portion and between the top and bottom side portions, said “Z” shaped steel channel to be fastened to a first and a second of said one or more panels.

30. (new) A system for improving penetration resistance of a structure, the system comprising:

a cured panel of a sprayed elastomeric material having a predetermined thickness;

a channel attached around a periphery of the cured panel; and

a plurality of fasteners to fasten said channel to a surface of a structure.

31. (new) The system of claim 30 wherein said cured panel comprises a fabric reinforcing layer.

32. (new) The system of claim 31 wherein said fabric reinforcing layer is embedded in the elastomeric material.

33. (new) The system of claim 31 wherein said fabric reinforcing layer is constructed of at least one of aramid, polyester, yarns, and fibers.

34. (new) The system of claim 31 wherein said fabric reinforcing layer comprises an open grid pattern.

35. (new) The system of claim 31 wherein said channel is fastened to an interior surface of said structure.

36. (new) The system of claim 30 wherein said cured panel has a thickness in the range of about 100 mil to about 250 mil.

37. (new) The system of claim 30 wherein said cured panel contains shrapnel between the elastomeric panel and the surface of the structure.

38. (new) The system of claim 30 wherein said cured panel comprises an elastomeric material with a percent elongation at break in a range of about 100-800%.

39. (new) The system of claim 38 wherein said elastomeric material has a percent elongation at break in a range of about 400-800%.

40. (new) The system of claim 38 wherein said elastomeric material has a tensile strength greater than about 2000 psi.

41. (new) The system of claim 38 wherein said elastomeric material is a material selected from the group consisting of polyurea; polysiloxane; polyurethane, and a polyurea/polyurethane hybrid.

42. (new) A method of constructing a penetration resistant panel, the method comprising:

positioning a reinforcing fabric material against a molding surface;

spraying a first layer of an elastomeric material to a first thickness onto a first portion of the reinforcing fabric material;

flipping the reinforcing fabric material with the first layer of the elastomeric material over to expose a second portion of the reinforcing fabric; and

spraying a second layer of the elastomeric material to a second thickness onto the second portion of the reinforcing fabric material.

43. (new) The method of claim 42 further comprising:

finishing around a periphery of the blast resistant panel to produce a final penetration resistant panel.

44. (new) The method of claim 42 further comprising:

finishing around a periphery of the blast resistant panel to produce a final penetration resistant panel; and

removing the penetration resistant panel from the molding surface.

45. (new) The method of claim 42 wherein the flipping the reinforcing fabric material with the first layer of the elastomeric material comprises:

flipping the reinforcing fabric material with the first layer of the elastomeric material over on the molding surface to expose the second portion of the reinforcing fabric.

46. (new) The method of claim 42 wherein the elastomeric material is a material selected from the group consisting of polyurea; polysiloxane; polyurethane, and a polyurea/polyurethane hybrid.

47. (new) The method of claim 42 wherein the reinforcing fabric is substantially planar.

48. (new) The method of claim 47 wherein the reinforcing fabric comprises a substantially open grid pattern.

49. (new) The method of claim 42 wherein the penetration resistant panel is blast resistant.

50. (new) The method of claim 42 further comprising allowing the penetration resistant panel to cure.

51. (new) The method of claim 50 further comprising securing the cured penetration resistant panel to a surface of a structure.

52. (new) A blast and penetration resistant system comprising:

a cured panel of a sprayed elastomeric material having a fabric reinforced layer embedded therein, the cured panel having a predetermined thickness between about 100 mil and 250 mil, a percent elongation at break in a range of about 400-800% and a tensile strength of about 2000 psi or greater, the fabric reinforcing layer being substantially planar and including warp and fill yarns defining an open grid pattern with openings of up to about 0.5 inches by 0.25 inches and a tensile strength of about 1200 psi by 1200 psi; and

a steel channel subsystem configured to be attached around a periphery of the cured panel and the steel channel subsystem and the periphery of the cured panel fastenable to a surface.

53. (new) The blast and penetration resistant system of claim 52 further comprising:

fastener elements to pass through the steel channel subsystem and secure the steel channel subsystem and the periphery of the cured panel to the surface.

54. (new) The penetration resistant panel of claim 52 wherein the elastomeric material is a material selected from the group consisting of polyurea; polysiloxane; polyurethane, and a polyurea/polyurethane hybrid.

55. (new) The penetration resistant panel of claim 52 wherein the steel channel subsystem comprises a "U"-shaped steel channel.